Application Serial No. 09/857,402

Filing Date: June 1, 2001

Docket No: 976-11 PCT/US/RCE II

Page 2 of 13

IN THE CLAIMS

Please cancel claim 24 without prejudice.

Please amend claim 42 as follows:

1-14. (Cancelled)

- 15. (Previously Presented) A vaccine formulation suitable for mucosal administration comprising:
 - (a) a mixture of a first vaccine antigen which is Hepatitis B virus surface antigen (HBsAg), and
 - (b) a second vaccine antigen which is a viral nucleocapsid or a virus-like particle; wherein said HBsAg has an adjuvant effect on the second vaccine antigen, and wherein said first and second vaccine antigens are each present from 0.001mg to 1mg.
- 16. (Previously Presented) The vaccine formulation according to claim 15, wherein the viral nucleocapsid is the nucleocapsid antigen of Hepatitis B virus.
- 17. (Previously Presented) The vaccine formulation according to claim 15, wherein the virus-like particle is the virus-like particle antigen of Human Papilloma virus (HPV).
- 18. (Previously Presented) The vaccine formulation according to claim 15, wherein the viral nucleocapsid is the nucleocapsid antigen of Hepatitis C virus.

19-20. (Cancelled)

- 21. (Previously Presented) The vaccine formulation according to claim 15, wherein the vaccine formulation is suitable for nasal administration.
- 22. (Previously Presented) The vaccine formulation according to claim 15, wherein the vaccine formulation is suitable for use as a therapeutic vaccine against Hepatitis B virus (HBV) infection.

Application Serial No. 09/857,402

Filing Date: June 1, 2001

Docket No: 976-11 PCT/US/RCE II

Page 3 of 13

23. (Previously Presented) The vaccine formulation according to claim 15, wherein the vaccine formulation is suitable for use as a preventive vaccine against Hepatitis B virus (HBV) infection.

- 24. (Cancelled)
- 25. (Previously Presented) The vaccine formulation according to claim 17, wherein the vaccine formulation is suitable for use as a preventive vaccine against Human Papilloma virus (HPV) infection.
- 26. (Previously Presented) The vaccine formulation according to claim 18, wherein the vaccine formulation is suitable for use as a therapeutic vaccine against Hepatitis C virus (HCV) infection.
- 27. (Previously Presented) The vaccine formulation according to claim 17, wherein the vaccine formulation is suitable for use as a therapeutic vaccine against Human Papilloma virus (HPV) infection.

28-37. (Cancelled)

- 38. (Previously Presented) A vaccine formulation suitable for mucosal administration, comprising:
 - (a) a mixture of a first vaccine antigen which is Hepatitis B virus surface antigen (HBsAg), and
 - (b) a second vaccine antigen and a third vaccine antigen, wherein the vaccine antigens are each present from 0.001mg to 1mg.
- 39. (Previously Presented) The vaccine formulation according to claim 38, wherein the second vaccine antigen is an antigen of a viral nucleocapsid or a virus-like particle.
- 40. (Previously Presented) The vaccine formulation according to claim 39, wherein the virus-like particle is the virus-like particle antigen of Human Papilloma Virus (HPV).

Application Serial No. 09/857,402

Filing Date: June 1, 2001

Docket No: 976-11 PCT/US/RCE II

Page 4 of 13

41. (Previously Presented) The vaccine formulation according to claim 39, wherein the third vaccine antigen is Hepatitis B virus core antigen (HBcAg).

42. (Currently Amended) A method for <u>administering a vaccine antigen which is a viral nucleocapsid or a virus-like particle, the method comprising treating or preventing a viral infection comprising administering mucosally a vaccine formulation according to claim 15.</u>